REMARKS

The above-identified application has been amended. The multiple dependency of claims 6, 7, 10, 12, 13, 14 and the referenced numbers within claims 1-14 have been deleted. The claim language has also been amended for easier understanding of the defined subject matter. The marked-up version of the amended claims is attached hereto as APPENDIX A. Favorable action on the application is solicited.

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Respectfully submitted,

By_____

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APPENDIX A

Version With Markings to Show Changes Made

1. A linear inductive transducer [(T)] [including]comprising:

[•] electric windings [(1-4)][with]including

[•] a first primary winding [(1)], and

[•] a pair of secondary windings[(2,4)],

[•] a magnetic core[(8)], for performing linear displacements relative to the electric windings,

[•] a pair of input terminals [(5,6)] electrically connected to said first primary winding [(1)] [•] and adapted for being electrically connected to a power supply unit [(C,11,13)],

[•] at least [an]one output terminal [(7)] electrically connected to said electric windings [(1-4)], the transducer [(T)] being adapted for providing, through the output terminal [(7)], an electric signal [(Vo)] indicative of the mutual position between said electric windings [(1-4)] and said magnetic core [(8)], [characterized in that] wherein the electric windings include a second primary winding [(3)] between said first primary winding [(1)] and [an input terminal] one of said [pair] input terminals [(5,6)], [the] said first and second primary windings [(1,3)] being electrically connected to each other and to said pair of secondary windings [(2,4)], said electric signal [(Vo)] including a first [(Vs)] and a second [(Vs')]component, indicative of the mutual position between the magnetic core [(8)] and said primary windings [(1,3)] and said secondary windings [(2,4)], respectively.

2. The transducer according to claim 1, wherein [the] said first primary winding [(1)] and [the] said second primary winding [(3)] are mutually connected in series at a connection point [(9)], [the] and said secondary windings [(2,4) being] are electrically connected to said connection point [(9)].

3. The transducer according to claim 2, wherein [each of] said first primary winding [(**1**)] and said second primary winding [(**3**)] [provides] are each adapted to provide a signal [(**V1,V3**)]that is variable as the mutual position between said first primary winding [(**1**)] or said second primary winding [(**3**)] and said magnetic core [(**8**)] varies, the first component [**Vs**] of said electric signal [(**Vo**)] being proportional to the difference between the signals [(**V1,V3**)] provided by the first and second primary windings, [(**1,3**)]respectively.

4. The transducer according to claim 3, wherein the secondary windings [(**2,4**)] are mutually connected in phase opposition.

5. The transducer according to claim 4, wherein each of said secondary windings [(**2,4**)] provides an induced signal [(**V2,V4**)] that is variable as the mutual position between said electric windings [(**1-4**)] and said magnetic core [(**8**)] varies, the second component [(**Vs'**)] of the electric signal [(**Vo**)] being proportional to the difference between said induced signals [(**V2,V4**)].

6. The transducer according to [one of the preceding claims] claim 1, wherein said first primary winding [(**1**)] and said second primary winding [(**3**)] have the same number [(**N1**)] of turns, and each of said secondary windings [(**2,4**)] has the same number [(**N2**)] of turns as the other.

7. The transducer according to [one of the preceding claims] claim 1, wherein said power supply unit includes two sinusoidal voltage generators [(**11,13**)] connected in phase opposition.

8. A linear inductive transducer [(**T'**)] [including] comprising:

[•] electric windings [(**21-24**)] [with] including

- [•] a first primary winding [(**21**)], and
- [•] a pair of secondary windings[(**22,24**)],

[•] a magnetic core [(28)] for performing linear displacements relative to the electric windings,

[•] a pair of input terminals [(32,34)] electrically connected to said primary winding [(21)] and adapted for being electrically connected to a power supply unit [(11,13;11')], and

[•] output terminals [(31,33,35)] electrically connected to said electric windings [(21-24)], the transducer [(T')] being adapted for providing[,] at least one of said output terminals [(31,33,35),] with an electric signal [(Vo;Vo';Vo")] indicative of the mutual position between said electric windings [(21-24)] and said magnetic core [(8)], [characterized in that] wherein the electric windings include a second primary winding [(23)] between said first primary winding [(21)] and an input terminal of said pair [(32,34)], the [primary] [(21)] first and [the] second primary [(23)] windings being mutually connected in series at a connection point [(29)], said output terminals [include]including three output terminals [(31,33,35)] electrically connected to the ends of said pair of secondary windings [(22,24)], and to said connection point [(29)] between the primary windings, [(21,23)]respectively, the transducer [(T')] being adapted for selectively providing said electric signal [(Vo;Vo';Vo")] at one [(31;33)] or a pair [(31,35)] of said three output terminals [(31,33,35)].

9. The transducer according to claim 8, wherein the secondary windings [(22,24)] are mutually connected in phase opposition.

10. The transducer according to claim 8 [or claim 9], wherein two [(33,35)] of said three output terminals [(31,33,35)] are adapted for being electrically connected to one another for achieving an electric connection between the primary windings [(21,23)] and the secondary windings [(22,24)], the transducer [(T')] being adapted for providing said electric signal [(Vo)] at the other [(31)] of said three output terminals [(31,33,35)].

11. The transducer according to claim 10, wherein said electric signal [(Vo)] includes a

first [(**Vs**)] and a second [(**Vs'**)] component, indicative of the mutual position between the magnetic core [(**28**)] and the primary windings [(**21,23**)] and[, respectively, the second]secondary windings respectively[(**22,24**)].

12. The transducer according to claim 8 [or claim 9], wherein two [(**31,35**)] of said three output terminals [(**31,33,35**)] are adapted for being insulated, the transducer [(**T'**)] being adapted for providing said electric signal [(**Vo'**)] at the other [(**33**)] of said three output terminals [(**31,33,35**)].

13. The transducer according to [one of claims from 8 to 12] claim 8, wherein said power supply unit includes two sinusoidal voltage generators [(**11,13**)] connected in phase opposition.

14. The transducer according to claim 8 [or claim 9], wherein the output terminal [(**33**)] connected to the connection point [(**29**)] is adapted for being insulated, the transducer [(**T'**)] being adapted for providing said electric signal [(**Vo"**)] at the two output terminals [(**31,35**)] at the ends of said pair of secondary windings [(**22,24**)].